

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Original) An endodontic instrument, comprising:
a shaft that includes an end, a tip, one or more flutes, and a longitudinal axis,
wherein at least one flute includes a cutting edge that is the leading edge of the flute
when the instrument is rotated in a first direction of rotation about the longitudinal
axis so that the instrument is configured to cut, without requiring force to be applied
to the instrument in an end-to-tip longitudinal direction, when the shaft is rotated in ~~a~~
the first direction of rotation about the longitudinal axis, and wherein the at least one
flute spirals around the shaft ~~in an~~ the end-to-tip longitudinal direction and in a
second direction of rotation that is opposite from the first direction of rotation.
2. (Original) The instrument of claim 1, further comprising:
at least one helix that includes one or more cross cuts.
3. (Original) The instrument of claim 1, wherein:
the shaft includes a portion where the cutting edge is rolled.
4. (Original) The instrument of claim 1, wherein:
the one or more flutes have S-shaped splines.
5. (Original) The instrument of claim 4, wherein:
the tip is a non-cutting tip.
6. (Original) The instrument of claim 4, wherein:
the tip is a cutting tip.

7. (Original) The instrument of claim 1, wherein:
the cutting edge of the flute has a zero cutting angle.
8. (Original) The instrument of claim 7, wherein:
a cross section of the shaft has a quadrilateral-like shape.
9. (Original) The instrument of claim 7, wherein:
a cross section of the shaft has a triangle-like shape.
10. (Original) The instrument of claim 1, wherein:
the shaft is fabricated from one of Ni-Ti and Ni-Ti alloy.
11. (Original) The instrument of claim 1, further comprising:
an attachment for coupling the shank end of the instrument to an engine operable to rotate the instrument.
12. (Original) The instrument of claim 1, wherein:
the cutting edge is a right handed cutting edge.
13. (Original) The instrument of claim 1, wherein:
the cutting edge is a left handed cutting edge.
14. (Original) The instrument of claim 1, wherein:
the instrument is a hand-type endodontic instrument.
15. (Original) The instrument of claim 1, wherein:
the instrument is a rotary-type endodontic instrument.
16. (Original) The instrument of claim 1, wherein:
the one or more flutes taper in a shank-to-tip direction.
17. (Original) The instrument of claim 1, wherein:
at least one flute has no radial lands.

18. (Original) The instrument of claim 1, wherein:

at least one flute has reduced radial lands.

19. (Currently Amended) An endodontic instrument, comprising:

a shaft that includes an end, a tip, one or more flutes, and a longitudinal axis, wherein at least one flute includes a cutting edge that is the leading edge of the flute when the instrument is rotated in a first direction of rotation about the longitudinal axis so that the instrument is configured to cut, without requiring the instrument to be threaded into a material to be cut, when the shaft is rotated in-a the first direction of rotation about the longitudinal axis, and wherein the at least one flute is situated to wrap around the shaft in an end-to-tip longitudinal direction and in a second direction of rotation that is opposite from the first direction of rotation, ~~wherein the at least one flute includes one or more cross cuts, and wherein the at least one flute has one of reduced or no radial lands.~~

20. (Currently Amended) An endodontic instrument, comprising:

a shaft that includes an end, a tip, one or more flutes, and a longitudinal axis, wherein the instrument is a rotary type instrument and at least one flute includes a cutting edge that is the leading edge of the flute when the instrument is rotated in a first direction of rotation about the longitudinal axis so that the instrument is configured to cut when the shaft is rotated in-a the first direction of rotation about the longitudinal axis, wherein the instrument is not required to be rotated in a reciprocating manner in order to cut, and wherein the at least one flute is situated to wrap around the shaft in an end-to-tip longitudinal direction and in a second direction of rotation that is opposite from the first direction of rotation.